5754

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CTENOBETHYLUS (BETHYLIDAE) A NEW SYNONYM OF *IRIDOMYRMEX* (FORMICIDAE, HYMENOPTERA)[1]

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In 1939, in a paper describing several new genera and species of Baltic Amber Hymenoptera, C. T. Brues erected *Ctenobethylus succinalis gen. et sp. nov.* for a single specimen of what he took to be an apterous female bethylid. I recently chanced upon this description, and was immediately struck by the ant-like habitus of the type as portrayed in Brues' fig. 7. It was also noted that the figure showed only 12 antennomeres, although Brues had made a diagnostic point of claiming "13-jointed" antennae for his genus.

My suspicion that the type of *C. succinalis* is actually a worker ant of the dolichoderine genus *Iridomyrmex* was confirmed when it was sent for my study. The specimen has the legs folded up so as to obscure the waist, which explains why Brues did not see the petiolar scale. In the preparation as it now stands, however, the scale is partly visible in a left-side view, although it is covered with a white film. The specimen also has 12-merous antennae, and in fact closely corresponds to small-sized workers of *Iridomyrmex goepperti* with which I have compared it directly.

Although I have not seen the type of *I. goepperti,* I compared 11 worker specimens of this commonest of all Baltic Amber ants lent from the Museum of Comparative Zoology collection. (*I. goepperti* made up over half of the more than 10,000 Baltic Amber ants determined by W. M. Wheeler at one time or another; see Wheeler, 1914: *op. cit. infra,* p. 8.) These specimens and the *C. succinalis* type meet very well the available descriptions of *I. goepperti.* The formal synonymy is:

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3

Iridomyrmex goepperti

Hypoclinea göpperti Mayr, 1868, Beitr. Naturk. Preuss. **1:** 56, pl. 1, fig. 3–7; pl. 3, fig. 42–46, worker, queen, male.

Iridomyrmex goepperti: Wheeler, 1914, Schrift. Phys-ökon. Ges. Koenigsberg, **55:** 90–91, worker.

Ctenobethylus succinalis Brues, 1939, Ann. Entomol. Soc. Amer. **32:** 261–263, fig. 7, ♀ (*recte* worker). Type: Museum of Comparative Zoology, Harvard University, No. 7666. NEW SYNONYM.

Brues' figure errs in omitting the spurs, present one on each tibial apex, and also in showing the trunk as without an impressed metanotal groove; actually, this groove is distinctly though modestly impressed in the type.

I. goepperti is left in *Iridomyrmex* for the time being, although this genus is almost surely a diphyletic assemblage. The Indo-Australian species, including the type species of *Iridomyrmex, I. purpureus* (=*I. detectus*), differ from the New World members (*I. humilis* group) in that they lack Pavan's apparatus (with gland) at gastric sternites IV and V. The status of the Baltic Amber *Iridomyrmex* with respect to this character has not been determined, because the few samples available to me have the underside of the gastric apex obscured by films. As already stressed by Wheeler, *I. goepperti* lacks a distinct epistomal (frontoclypeal) suture and frontal triangle, conditions atypical for *Iridomyrmex* (and for ants in general). It is likely also that the living species of *Iridomyrmex* divide further into groups on the basis of proventricular anatomy, position of compound eyes, larval morphology, karyotype, and perhaps other characters. If some of these groups represent different genera, as seems likely, we do not know yet how the divisions will cut, or what genus-level names are available.

The "*Iridomyrmex* Problem" is an exceptionally complex one, calling for nothing less than a full-scale revision of the Tapinomini. Until that revision can be made, the genus *Iridomyrmex* is best left as it stands, and *Ctenobethylus,* with type and sole species *C. succinalis,* is its *new synonym.*

In recent correspondence with E. O. Wilson and H. E. Evans, I learned that they had jointly examined *Ctenobethylus succinalis* several years ago, and tentatively considered it to belong to *Iridomyrmex,* but they did not complete the study. I am grateful

for their opinions, but since the present study was made independently, they should not be held responsible for my conclusions. F. M. Carpenter has my thanks for the improved preparation and the loan of the *C. succinalis* type.